

## CLAIMS

We claim:

- 1        1. A pipe repair tool, comprising:
  - 2            a generally cylindrical main body having a top surface and a bottom surface;
  - 4            a generally cylindrical, compressible alignment portion having a bottom surface disposed against the top surface of said main body and a top surface;
  - 7            a rigid compression plate having a bottom surface disposed against the top surface of said alignment portion and a top surface;
  - 10          an elongate rod extending through the center of the main body, the alignment portion and the compression plate, the rod having a top end that extends though the top surface of the compression plate and a bottom end that extends through the bottom surface of the main body;
  - 15          a fastener secured to the top end of the said rod; and
  - 16          a rotatable fastener secured to the bottom end of said rod;
  - 17          whereby the pipe repair tool is inserted into an open end of a cut pipe so that the top surface of said main body aligns with the open end of the cut pipe, and the alignment portion is compressed by rotating the rotatable fastener to secure the pipe repair tool inside of the cut pipe.

1           2. The pipe repair tool according to claim 1, further  
2 comprising a flat washer disposed along the bottom surface of the  
3 main body.

1           3. The pipe repair tool according to claim 1, wherein said  
2 rotatable fastener comprises a wing nut.

1           4. The pipe repair tool according to claim 1, wherein said  
2 main body is tapered so that the bottom surface of the main body  
3 comprises a smaller circumference than the top surface of the  
4 main body.

1           5. The pipe repair tool according to claim 1, wherein said  
2 alignment portion comprises a rubber bushing.

1           6. The pipe repair tool according to claim 1, wherein said  
2 main body is made from a plastic material.

1           7. The pipe repair tool according to claim 6, wherein the  
2 plastic material comprises ultra high molecular weight  
3 polyethylene.

1           8. A pipe repair assembly, comprising:  
2           a pipe repair tool comprising:  
3                 a generally cylindrical main body having a top surface  
4                 and a bottom surface;  
5                 a generally cylindrical, compressible alignment portion  
6                 having a bottom surface disposed against the top surface of said  
7                 main body and a top surface;  
8                 a rigid compression plate having a bottom surface  
9                 disposed against the top surface of said alignment portion and a  
10               top surface;  
11               an elongate rod extending through the center of the  
12               main body, the alignment portion and the compression plate, the  
13               rod having a top end that extends though the top surface of the  
14               compression plate and a bottom end that extends through the  
15               bottom surface of the main body;  
16               a fastener secured to the top end of the said rod; and  
17               a rotatable fastener secured to the bottom end of said  
18               rod; and  
19               a generally cylindrical pipe coupling having an open top end  
20               and an open bottom end;  
21               whereby the pipe repair tool allows the pipe coupling to  
22               connect two cut sections of pipe from a damaged pipeline without  
23               having to bevel the cut ends of the pipe sections.

1           9. The pipe repair assembly according to claim 8, further  
2           comprising a top gasket disposed in the open top end of said pipe  
3           coupling.

4           10. The pipe repair assembly according to claim 8, further  
5 comprising a bottom gasket disposed in the bottom end of said  
6 pipe coupling.

1           11. The pipe repair assembly according to claim 8, further  
2 comprising a flat washer disposed along the bottom surface of the  
3 main body.

1           12. The pipe repair assembly according to claim 8, wherein  
2 said rotatable fastener comprises a wing nut.

1           13. The pipe repair assembly according to claim 8, wherein  
2 said main body is tapered so that the bottom surface of the main  
3 body comprises a smaller circumference than the top surface of  
4 the main body.

1           14. The pipe repair assembly according to claim 8, wherein  
2 said alignment portion comprises a rubber bushing.

1           15. The pipe repair assembly according to claim 8, wherein  
2 said main body is made from a plastic material.

1           16. The pipe repair assembly according to claim 15, wherein  
2 the plastic material comprises ultra high molecular weight  
3 polyethylene.